

**Experiment Number:** 10119 - 01

**Test Type:** CHRONIC

**Route:** GAVAGE

**Species/Strain:** RATS/F 344/NCTR

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Furan

**CAS Number:** 110-00-9

**Date Report Requested:** 06/03/2014

**Time Report Requested:** 08:44:34

**First Dose M/F:** 09/07/09 / NA

**Lab:** NCTR

36 Week

**NTP Study Number:** C10119

**Lock Date:** 06/02/2014

**Cage Range:** ALL

**Date Range:** ALL

**Reasons For Removal:** ALL

**Removal Date Range:** ALL

<b>Treatment Groups:</b>	Include 017 0 Vehicle 36 wk	Include 018 0.02 Furan 36 wk	Include 019 0.044 Furan 36wk
	Include 020 0.092 Furan 36wk	Include 021 0.2 Furan 36 wk	Include 022 0.44 Furan 36 wk
	Include 023 0.92 Furan 36 wk	Include 024 2 Furan 36 wk	

**Study Gender:** Male

**TDMSE Version:** 3.0.2.0\_001

**PWG Approval Date:** NONE

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 First Dose M/F: 09/07/09 / NA  
 Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 0 Vehicle 36 wk	DAY ON TEST																				
		0 2 5 3	0 2 5 2	0 2 5 2																	
ANIMAL ID	0 0 2 0 0 4 5 0 0 2	0 0 1 1 1 3 6 1 1 2	0 0 1 1 1 7 9 2 1 1	0 0 1 1 1 7 9 2 1 2	0 0 2 2 2 4 5 9 6 2	0 0 2 2 2 7 9 3 0 2															
<b>* TOTALS</b>																					

### ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Basophilic Focus																	X					1
Deformity		X																				1
Granuloma		2	1	1	1	1	1			1	1	1	1	1								12 1.2
Necrosis, Focal										1												1 1.0
Tension Lipidosis																						1 4.0
Vacuolization Cytoplasmic																						11 1.1
Bile Duct, Biliary Tract, Hyperplasia																						1 1.0
Mesentery																						1
Fat, Necrosis																						1 4.0
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Infiltration Cellular, Lymphocyte																						2 1.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0 Vehicle 36 wk</b>	DAY ON TEST																						
		0 2 5 3	0 2 5 2	0 2 5 2																			
ANIMAL ID																							
		0 0 2 0 0 2 4 0 0 2	0 0 5 7 0 1 5 3 0 2	0 0 1 1 1 3 6 4 5 2	0 0 1 1 1 6 7 2 5 1	0 0 1 1 1 7 9 4 2 1	0 0 1 1 1 9 1 5 7 2	0 0 2 2 2 9 1 5 7 2	0 0 2 2 2 9 3 5 0 2	0 0 2 2 2 3 3 5 0 2													
Acinus, Degeneration		1																					1 1.0
Salivary Glands		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Stomach, Forestomach		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Stomach, Glandular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
<b>CARDIOVASCULAR SYSTEM</b>																							
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Cardiomyopathy		2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19 1.4
<b>ENDOCRINE SYSTEM</b>																							
Adrenal Cortex		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Adrenal Medulla		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Parathyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Pars Distalis, Cyst																X		X					2
Pars Distalis, Hyperplasia																	2						2 2.0
Thyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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M .. Missing tissue

X .. Lesion present

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Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE	0 Vehicle 36 wk	DAY ON TEST																							
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	4	4	4
		2	4	5	7	0	1	3	6	7	9	1	4	5	7	9	3	3	3	8	2	3	2	3	3
		0	4	5	3	4	5	4	2	4	9	9	6	5	0	0	2	5	0	9	2	1	1	7	2
		2	2	2	1	2	2	2	1	1	2	1	2	2	2	1	2	1	2	1	1	1	1	2	2

\* TOTALS

## GENERAL BODY SYSTEM

NONE

## GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20		
Hypospermia																								1	4.0
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20		
Inflammation, Suppurative		1			4	2					1		4		4									7	2.9
Inflammation, Chronic Active	1	2	1	2		1	2	2					2			1	2							10	1.6
Duct, Ectasia		2			4		3		3		4		4	2										8	3.3
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20		
Inflammation, Suppurative			1				2																	4	1.5
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20		
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20		
Interstitial Cell, Hyperplasia								1																1	1.0
Seminiferous Tubule, Degeneration																								1	4.0

## HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	

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Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE																						
0 Vehicle 36 wk	ANIMAL ID	0 0 2 0 0 4 5 0 0 2	0 0 1 0 1 5 7 1 1 2	0 0 1 1 1 3 6 1 1 2	0 0 1 1 1 7 9 2 1 2	0 0 2 2 2 4 5 9 6 2	0 0 2 2 2 7 9 5 0 2	0 0 3 3 3 3 3 3 2 1														
		* TOTALS																				
Spleen Pigmentation		+ + + + + + + + + + + + + + + + + + + +																				20
																						1 3.0
Thymus Atrophy		+ + + + + + + + + + + + + + + + + + + +																				20
																						6 2.5
<b>INTEGUMENTARY SYSTEM</b>																						
Mammary Gland		+ + + + + + + + + + + + + + + + + + + +																				20
Skin Fibrosis		+ + + + + + + + + + + + + + + + + + + +																				20
																						2 3.5
<b>MUSCULOSKELETAL SYSTEM</b>																						
Bone, Femur		+ + + + + + + + + + + + + + + + + + + +																				20
<b>NERVOUS SYSTEM</b>																						
Brain, Brain Stem		+ + + + + + + + + + + + + + + + + + + +																				20
Brain, Cerebellum		+ + + + + + + + + + + + + + + + + + + +																				20
Brain, Cerebrum		+ + + + + + + + + + + + + + + + + + + +																				20
<b>RESPIRATORY SYSTEM</b>																						
Lung Infiltration Cellular, Histiocyte		+ + + + + + + + + + + + + + + + + + + +																				20
																						2 1.0

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**Test Type: CHRONIC**

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**Species/Strain:** RATS/F 344/NCTR

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First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.02 Furan 36 wk</b>	DAY ON TEST																					
		0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 2	0 2 5 2														
ANIMAL ID	0 0 0 0 1 1 1 1 2	0 0 0 0 1 1 1 1 2	0 0 1 1 3 4 4 4 1	0 0 1 1 3 4 4 4 1	0 0 2 2 8 8 7 7	0 0 2 2 8 8 7 7	0 0 3 3 0 0 8 8	0 0 3 3 0 0 9 9	0 0 3 3 1 1 2 2	0 0 4 4 3 3 1 1	0 0 4 4 3 3 1 1	0 0 4 4 6 6 5 5	0 0 4 4 6 6 1 1	0 0 4 4 6 6 3 3	0 0 4 4 6 6 6 6	0 0 4 4 6 6 1 1	0 0 4 4 6 6 1 1	0 0 4 4 6 6 1 1	0 0 4 4 6 6 1 1			
<b>* TOTALS</b>																						

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Granuloma	1	1	1	1	1	2		1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	16 1.1
Hepatodiaphragmatic Nodule																X							1
Inflammation, Chronic Active																1	1						2 1.0
Vacuolization Cytoplasmic	1	1		2	1		1	1	1							1	1						11 1.1
Bile Duct, Biliary Tract, Hyperplasia																							1 1.0
Hepatocyte, Necrosis																2	1						5 1.2
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Infiltration Cellular, Lymphocyte																1	1						2 1.0
Acinus, Degeneration	1	2																					2 1.5
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

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Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.02 Furan 36 wk</b>	DAY ON TEST																					
		0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2		
ANIMAL ID	0 0 0 0 1 1 1 1 1 1	0 0 0 0 1 1 3 7 1 3 4 8 1 7 4 1 1 2 1 1	0 0 1 1 1 2 4 8 1 7 7 8 0 0 3 3 1 3 4 4 3 4 6 6	0 0 2 2 2 2 7 7 8 0 0 3 3 1 3 4 4 3 4 6 6	0 0 3 3 3 3 0 0 3 3 1 3 4 4 3 4 6 6	0 0 4 4 4 4 1 1 3 3 0 0 5 5 1 1 3 3 6 6																
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
<b>CARDIOVASCULAR SYSTEM</b>																						
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Cardiomyopathy	2	2	1	3	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18 1.3
<b>ENDOCRINE SYSTEM</b>																						
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Parathyroid Gland	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Pars Distalis, Angiectasis																	2					1 2.0
Pars Distalis, Cyst																	X					1
Pars Distalis, Hyperplasia																	2					2 3.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Ultimobranchial Cyst																	X					1
Follicle, Cyst																	2					1

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Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 0.02 Furan 36 wk	DAY ON TEST																		
		0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 3	0 2 5 2							
ANIMAL ID	0 0 0 0 1 1 8 1	0 0 0 0 3 7 8 2	0 1 1 1 3 4 5 1	0 1 1 1 3 4 5 1	0 1 1 1 3 4 5 1	0 2 1 1 8 1 4 1	0 2 1 1 8 1 4 1	0 2 1 1 7 1 4 2	0 2 1 1 7 1 7 1	0 2 1 1 8 2 3 1	0 3 0 3 0 8 9 1	0 3 3 3 9 9 1 1	0 4 4 4 1 0 5 2	0 4 4 4 5 5 2 2	0 4 4 4 3 5 3 1	0 4 4 4 6 3 3 1	0 4 4 4 6 6 6 1		
	0 0 0 0 1 1 8 1	0 0 0 0 3 7 8 2	0 1 1 1 3 4 5 1	0 1 1 1 3 4 5 1	0 1 1 1 3 4 5 1	0 2 1 1 8 1 4 1	0 2 1 1 8 1 4 1	0 2 1 1 7 1 4 2	0 2 1 1 7 1 7 1	0 2 1 1 8 2 3 1	0 3 0 3 0 8 9 1	0 3 3 3 9 9 1 1	0 4 4 4 1 0 5 2	0 4 4 4 5 5 2 2	0 4 4 4 3 5 3 1	0 4 4 4 6 3 3 1	0 4 4 4 6 6 6 1		

## **GENERAL BODY SYSTEM**

**NONE**

## **GENITAL SYSTEM**

## **HEMATOPOIETIC SYSTEM**

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild      4) Marked

Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.044 Furan 36wk</b>	DAY ON TEST																				
		0 2 5 3	0 2 5 2																		
ANIMAL ID	0 0 0 7 1	0 0 1 6 2	0 1 1 4 1	0 1 1 4 3	0 1 5 3 3	0 1 7 7 1	0 2 0 8 1	0 2 2 8 0	0 2 3 8 5	0 2 2 8 7	0 2 2 8 0	0 2 2 6 2	0 2 2 8 6	0 2 3 4 4	0 2 3 5 5	0 2 4 5 4	0 2 4 5 4	0 2 5 5 4	0 2 5 5 4	0 2 5 5 4	0 2 5 5 4
	<b>* TOTALS</b>																				

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Granuloma	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1
Vacuolization Cytoplasmic	1	2	1	2	1				1	1	1	1	1	2	1	1	1	1	1	1	1	1.2
Hepatocyte, Necrosis	1		1	1										1								1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Infiltration Cellular, Lymphocyte																				1	1.0	
Acinus, Degeneration																				2	1.5	
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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M .. Missing tissue

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Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 0.044 Furan 36wk	DAY ON TEST ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
		3	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		0	0	0	1	1	1	1	2	2	2	2	2	3	3	3	3	4	4		
		0	6	6	2	4	4	5	7	0	2	3	8	8	2	2	6	8	4		
		7	0	2	4	1	3	3	7	1	8	0	5	7	0	2	6	3	4		
		1	2	2	2	1	1	1	1	1	2	1	1	2	1	1	1	1	2		
																				* TOTALS	

## CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Cardiomyopathy	2	1	2	2	1	1	1	1	2	1	1	1	2	1	4	1	1	1	1	18 1.4

## ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Pituitary Gland Pars Distalis, Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20 1 2.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

## GENERAL BODY SYSTEM

NONE

## GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

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FISCHER 344 RATS-NCTR RATS MALE 0.044 Furan 36wk	DAY ON TEST																					
		0 2 5 3	0 2 5 2																			
ANIMAL ID	0 0 0 7 1	0 0 1 6 2	0 1 1 4 1	0 1 1 4 3	0 5 3 7 1	0 7 0 3 1	0 2 4 1 1	0 4 3 7 1	0 2 2 1 1	0 2 3 0 2	0 8 5 0 2	0 8 7 5 1	0 2 2 1 1	0 2 2 1 2	0 2 2 1 1	0 3 3 2 1	0 3 3 2 1	0 4 4 4 1	0 4 5 5 1	0 4 5 5 1	0 4 4 4 1	0 4 4 4 1
Inflammation, Suppurative	2		4	3		4															5 10 4	3.2 1.7 3.0
Inflammation, Chronic Active		1	2	2		2		2	1	2		2		2	1	2		2			20	
Duct, Ectasia			4			2		2	4		1		4		2						1 8	1.0 1.1
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Infiltration Cellular, Lymphocyte																					1	1.0
Inflammation, Suppurative																					8	1.1
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
<b>HEMATOPOIETIC SYSTEM</b>																						
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Myeloid Cell, Hyperplasia																					1	2.0
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Hyperplasia, Lymphoid																					1	3.0
Infiltration Cellular, Plasma Cell																					2	2.5
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Fibrosis																					1	2.0
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Atrophy																					11	2.4
Hemorrhage																					1	2.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

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Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 0.044 Furan 36wk	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	ANIMAL ID	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
		3	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	
		0	6	6	2	4	4	5	7	0	2	3	8	8	2	6	8	4	5	5	
		7	0	2	4	1	3	3	7	1	8	0	5	7	0	2	6	3	4	2	
		1	2	2	2	1	1	1	1	1	2	1	1	2	1	1	1	1	2	1	

\* TOTALS

## INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	M	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	18
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Fibrosis																				1 3.0

## MUSCULOSKELETAL SYSTEM

Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

## NERVOUS SYSTEM

Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

## RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Congestion																				1 2.0
Infiltration Cellular, Histiocyte	2																			2 1.5
Inflammation, Chronic																				1 2.0
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

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**Test Type: CHRONIC**

## **Route: GAVAGE**

**Species/Strain:** RATS/F 344/NCTR

**Date Report Requested:** 06/03/2014

**Time Report Requested:** 08:44:34

**First Dose M/F:** 09/07/09 / NA

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 0.044 Furan 36wk	DAY ON TEST	ANIMAL ID																		* TOTALS	
		0 2 5 3	0 2 5 2																		
		0 0 0 7 1	0 0 0 6 2	0 1 1 2 2	0 1 4 4 1	0 1 4 3 1	0 1 5 3 1	0 1 7 7 1	0 2 0 1 1	0 2 3 8 1	0 2 3 8 2	0 2 8 7 1	0 2 8 7 1	0 3 2 0 2	0 3 2 2 1	0 3 2 2 1	0 3 6 6 1	0 3 8 3 1	0 4 4 4 1	0 4 4 5 2	0 4 5 4 1

## **SPECIAL SENSES SYSTEM**

Ear	+	1
Eye	+	20
Harderian Gland	+	20

## **URINARY SYSTEM**

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CAS Number: 110-00-9

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Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.092 Furan 36wk</b>	DAY ON TEST																				
		0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3	0 2 5 2															
ANIMAL ID	0 0 2 4 1	0 0 2 6 5	0 0 9 5 2	0 1 2 8 1	0 1 4 0 2	0 1 5 6 1	0 2 6 7 1	0 2 3 7 1	0 2 9 5 1	0 2 9 7 1	0 2 9 1 0	0 2 8 0 1	0 2 9 0 2	0 2 8 0 1	0 2 8 0 1	0 2 9 0 1	0 2 8 0 1	0 2 9 0 1	0 2 8 0 1	0 2 9 0 1	0 2 8 0 1
	<b>* TOTALS</b>																				

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Angiectasis																						1 1.0
Basophilic Focus																						1
Deformity																						1
Granuloma	1	1	1	1	1	2	1	1	1	2	1	1	2		2	1	1	1	1	1	1	19 1.2
Tension Lipidosis																						1 2.0
Vacuolization Cytoplasmic	1					2	1	1	1	1	1	1	2		1	1	1	1	1	1	1	14 1.1
Bile Duct, Biliary Tract, Hyperplasia																						1 1.0
Hepatocyte, Necrosis																						2 1.0
Mesentery						+									+	+						3
Thrombosis																						1
Fat, Necrosis						3									3	3						3 3.0

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FISCHER 344 RATS-NCTR RATS MALE <b>0.092 Furan 36wk</b>	DAY ON TEST																						
		0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3	0 2 5 2																	
ANIMAL ID	0 0 2 4 1	0 0 2 6 2	0 0 9 9 2	0 1 4 8 1	0 1 5 0 2	0 1 6 6 1	0 2 3 7 2	0 2 6 7 1	0 2 9 5 2	0 2 9 7 2	0 2 9 1 2	0 2 9 1 2	0 2 9 0 2	0 2 8 0 2	0 2 8 1 0	0 2 8 1 2	0 2 8 1 1	0 2 8 1 1	0 2 8 1 1	0 2 8 1 1	0 2 8 1 1		
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Infiltration Cellular, Lymphocyte																						1 1.0	
Acinus, Degeneration																						1 1.0	
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Epithelium, Degeneration																						1 1.0	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
<b>CARDIOVASCULAR SYSTEM</b>																							
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Cardiomyopathy	2	4	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1	19 1.4
<b>ENDOCRINE SYSTEM</b>																							
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Pars Distalis, Angiectasis																						1 4.0	
4																							

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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M .. Missing tissue

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 Route: GAVAGE  
 Species/Strain: RATS/F 344/NCTR

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Furan

CAS Number: 110-00-9

Date Report Requested: 06/03/2014  
 Time Report Requested: 08:44:34  
 First Dose M/F: 09/07/09 / NA  
 Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 0.092 Furan 36wk	DAY ON TEST ANIMAL ID																					
		0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3	0 2 5 2																
		0 0 2 4 1	0 0 2 6 9	0 0 2 4 8	0 1 5 6 0	0 1 1 6 6	0 2 3 6 7	0 2 2 9 5	0 2 3 9 7	0 2 3 9 1	0 2 3 9 1	0 2 3 9 0	0 2 3 8 0	0 2 3 8 0	0 2 3 6 3	0 2 3 6 0	0 2 3 6 1	0 2 3 6 1	0 2 3 6 1	0 2 3 6 1	0 2 3 6 1	
		<b>* TOTALS</b>																				
Pars Distalis, Hyperplasia		2	4			2									1							4 2.3
Thyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Infiltration Cellular, Lymphocyte																					2 2.0
Inflammation, Suppurative																					3 2.0
Inflammation, Chronic Active	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	13 2.0
Acinus, Hyperplasia																					1 2.0
Duct, Ectasia																					2 4.0

Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Inflammation, Suppurative																					4 1.5
Inflammation, Chronic Active																					1 1.0

Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
-----------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Interstitial Cell, Hyperplasia																					2 1.0

### HEMATOPOIETIC SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

	DAY ON TEST																					
		0 2 5 2	0 2 5 3																			
FISCHER 344 RATS-NCTR RATS MALE <b>0.092 Furan 36wk</b>	ANIMAL ID	0 0 2 4 1	0 0 6 5 2	0 1 4 8 1	0 1 5 0 2	0 1 6 6 1	0 2 3 7 1	0 2 9 9 2	0 2 9 9 1													
		* TOTALS																				
Bone Marrow		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Lymph Node, Mandibular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Lymph Node, Mesenteric Hyperplasia, Lymphoid		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Spleen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Thymus Atrophy		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
		2	3																			5 3.0
<b>INTEGUMENTARY SYSTEM</b>																						
Mammary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
<b>MUSCULOSKELETAL SYSTEM</b>																						
Bone, Femur		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
<b>NERVOUS SYSTEM</b>																						
Brain, Brain Stem		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Brain, Cerebellum		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Brain, Cerebrum		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.092 Furan 36wk</b>	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	2	3	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	4	4
	2	2	6	9	2	4	5	6	3	6	9	9	1	3	9	0	2	5	6	6	7	7
	4	6	5	6	2	8	0	6	7	5	7	9	1	0	8	0	3	6	9	1	1	1
	1	2	2	2	1	2	2	1	2	1	2	2	2	2	2	2	1	1	1	1	1	1

**\* TOTALS****RESPIRATORY SYSTEM**

Lung

Infiltration Cellular, Histiocyte  
Metaplasia, Osseous

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
																					1 1.0
																					1 1.0

Nose

Inflammation, Chronic Active  
Goblet Cell, Hyperplasia

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
																					1 2.0
																					1 2.0

Trachea

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

**SPECIAL SENSES SYSTEM**

Eye

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

Harderian Gland

Infiltration Cellular, Lymphocyte

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
																					2 1.0
																					2 1.0

**URINARY SYSTEM**

Kidney

Hydronephrosis  
Nephropathy

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
																					5 1.6
																					18 1.4

Urinary Bladder

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.2 Furan 36 wk</b>	DAY ON TEST																				
		0 2 5 2	0 2 5 3	0 2 5 2																	
ANIMAL ID	0 0 3 2 2	0 0 5 3 1	0 0 5 9 4	0 1 9 1 2	0 1 9 1 1	0 2 9 3 2	0 2 9 6 1	0 2 8 6 1	0 2 8 8 2	0 2 7 8 2	0 2 5 9 2	0 2 5 7 2	0 2 5 6 1	0 2 5 7 2	0 2 5 8 2	0 2 5 7 2	0 2 5 8 2	0 2 5 1 2	0 4 3 1 1	0 4 3 8 1	
	<b>* TOTALS</b>																				

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Angiectasis																					1 3.0
Congestion																					1 2.0
Granuloma	1	1	1	1	1		1	1	1		2		1	2	1	1	1				14 1.1
Hepatodiaphragmatic Nodule						X															1
Inflammation, Chronic Active										4											1 4.0
Mixed Cell Focus							X														1
Tension Lipidosis	2		4																		2 3.0
Vacuolization Cytoplasmic	2	2	2	1						1		2		2							6 1.7
Bile Duct, Subcapsular, Hyperplasia	1																				1 1.0
Hepatocyte, Hypertrophy																					1 2.0
Hepatocyte, Necrosis										4											1 4.0
Subcapsular, Fibrosis	2																				3 1.3
Subcapsular, Inflammation, Chronic																					2 1.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.2 Furan 36 wk</b>	DAY ON TEST ANIMAL ID																					
		0 2 5 2	0 2 5 3																			
Subcapsular, Pigmentation																						
Pancreas		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Infiltration Cellular, Lymphocyte																						1 2.0
Acinus, Degeneration																						2 2.0
Salivary Glands		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Stomach, Forestomach		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Stomach, Glandular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
<b>CARDIOVASCULAR SYSTEM</b>																						
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Cardiomyopathy			1	1	1	2	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	15 1.2
<b>ENDOCRINE SYSTEM</b>																						
Adrenal Cortex		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Accessory Adrenal Cortical Nodule																						1
X .. Lesion present																						
Adrenal Medulla		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Parathyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

**Test Type:** CHRONIC

**Route:** GAVAGE

**Species/Strain:** RATS/F 344/NCTR

**Date Report Requested:** 06/03/2014

**Time Report Requested:** 08:44:34

**First Dose M/F:** 09/07/09 / NA

Lab: NCTR

## **GENERAL BODY SYSTEM**

NONE

## **GENITAL SYSTEM**

## **HEMATOPOIETIC SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

| .. Insufficient tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate  
2) Mild 4) Marked

**Experiment Number:** 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

**Test Type: CHRONIC**

## **Route: GAVAGE**

**Species/Strain:** RATS/F 344/NCTR

**Date Report Requested:** 06/03/2014

**Time Report Requested:** 08:44:34

**First Dose M/F:** 09/07/09 / NA

Lab: NCTR

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

## I .. Insufficient tissue

M .. Missing tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild      4) Marked

Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.2 Furan 36 wk</b>	DAY ON TEST																				
		0 2 5 2	0 2 5 3	0 2 5 2																	
ANIMAL ID																					
	0 0 3 2 2	0 0 3 3 1	0 0 5 5 1	0 0 9 9 1	0 1 9 9 1	0 1 9 9 1	0 2 0 0 1														

**RESPIRATORY SYSTEM**

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Inflammation, Chronic																					1 2.0
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

**SPECIAL SENSES SYSTEM**

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Infiltration Cellular, Lymphocyte																					1 2.0

**URINARY SYSTEM**

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Hydronephrosis																					2 1.5
Nephropathy	2	1	1	2	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	20 1.2
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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Experiment Number: 10119 - 01  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344/NCTR

### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Furan

CAS Number: 110-00-9

Date Report Requested: 06/03/2014  
 Time Report Requested: 08:44:34  
 First Dose M/F: 09/07/09 / NA  
 Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 0.44 Furan 36 wk	DAY ON TEST																				
		0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3	0 2 5 2										
ANIMAL ID	0 0 2 8 2	0 0 4 9 2	0 0 5 7 2	0 0 8 0 1	0 0 8 3 1	0 1 7 4 2	0 1 8 0 2	0 1 9 3 1	0 1 2 9 1	0 2 6 6 1	0 2 5 5 1	0 2 5 6 2	0 2 5 2 1	0 2 5 3 2	0 2 5 5 1	0 2 5 5 2	0 2 5 5 1	0 2 5 5 2	0 2 5 5 1	0 2 5 5 2	0 2 5 5 2
	<b>* TOTALS</b>																				

### ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Cholangiofibrosis																					6 1.0
Granuloma	1	2	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	17 1.2
Hepatodiaphragmatic Nodule																					1
Tension Lipidosis																					1 2.0
Vacuolization Cytoplasmic	1	1	1	1	2	1	1			1	2		1		1		2				13 1.3
Bile Duct, Subcapsular, Hyperplasia										1	1	2			1	1	1	1	1	1	12 1.1
Hepatocyte, Necrosis										1	1		1	1							5 1.0
Subcapsular, Fibrosis										1	1	1	1	1							14 1.1
Subcapsular, Inflammation, Chronic										1	1	1	1	1							14 1.1
Subcapsular, Pigmentation										1	1	1	1	1							14 1.1
Mesentery																					1
Fat, Necrosis																					1 3.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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1-4 .. Lesion qualified as:

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Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.44 Furan 36 wk</b>	DAY ON TEST																							
		0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 3			
ANIMAL ID	0 0 2 8 2	0 0 4 9 2	0 0 5 7 2	0 0 8 0 1	0 0 8 3 1	0 0 8 4 2	0 0 8 0 2	0 0 7 0 1	0 0 7 3 2	0 0 7 9 1	0 0 8 9 1	0 0 9 6 1	0 0 9 5 2	0 0 6 1 2	0 0 6 5 2	0 0 6 2 1	0 0 5 2 2	0 0 5 1 1	0 0 5 2 1	0 0 5 3 2	0 0 5 4 2	0 0 5 5 2	0 0 5 9 2	
<b>* TOTALS</b>																								
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Infiltration Cellular, Lymphocyte																								1 1.0
Acinus, Degeneration																								3 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
<b>CARDIOVASCULAR SYSTEM</b>																								
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Cardiomyopathy	1	1	2	1	1	2	1	1	2	1	1	1	1	2	1	2	1	2	1	2	1	2	17 1.4	
<b>ENDOCRINE SYSTEM</b>																								
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Pars Distalis, Cyst	X																						1	
Pars Distalis, Hyperplasia	2																						3 1.7	

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

**Test Type: CHRONIC**

## **Route: GAVAGE**

**Species/Strain:** RATS/F 344/NCTR

**Date Report Requested:** 06/03/2014

**Time Report Requested:** 08:44:34

**First Dose M/F:** 09/07/09 / NA

Lab: NCTR

## **GENERAL BODY SYSTEM**

NONE

## **GENITAL SYSTEM**

## **HEMATOPOIETIC SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

#### A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild      4) Marked

Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.44 Furan 36 wk</b>	DAY ON TEST																						
		0 2 5 2	0 2 5 3	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 2	0 2 5 3	0 2 5 2														
ANIMAL ID	0 0 2 8 2	0 0 4 9 2	0 0 5 7 2	0 0 8 0 1	0 0 8 3 1	0 1 7 4 2	0 1 8 0 2	0 1 9 3 1	0 1 2 9 1	0 2 6 6 1	0 2 5 5 1	0 2 5 6 2	0 2 5 2 1	0 2 5 3 1	0 2 5 4 2	0 2 5 5 2	0 2 5 3 2	0 2 5 4 2	0 2 5 5 2	0 2 5 3 2	0 2 5 4 2	0 2 5 5 2	
Lymph Node Pancreatic, Hyperplasia, Lymphoid	+ 3																						1 1 3.0
Lymph Node, Mandibular Hyperplasia, Lymphoid Infiltration Cellular, Plasma Cell	+ 2 3																						20 1 2.0 1 3.0
Lymph Node, Mesenteric Hyperplasia, Lymphoid	+ 2 3																						20 1 2.0
Spleen Pigmentation	+ 2																						20 1 2.0
Thymus Atrophy	+ 2 3 2 4 2 3 2 4																						20 8 2.8
<b>INTEGUMENTARY SYSTEM</b>																							
Mammary Gland	+ +																						20
Skin	+ +																						20
<b>MUSCULOSKELETAL SYSTEM</b>																							
Bone, Femur	+ +																						20
<b>NERVOUS SYSTEM</b>																							
Brain, Brain Stem	+ +																						20

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 0.44 Furan 36 wk	DAY ON TEST ANIMAL ID																							
		0 2 5 2	0 2 5 3	0 2 5 2																				
		0 0 2 8 2	0 0 4 5 2	0 0 8 8 1	0 0 1 7 7	0 0 1 7 8	0 0 1 9 9	0 0 2 6 6	0 0 2 6 6	0 0 2 5 5														
		2 9 2	7 0 2	3 3 1	4 0 2	8 0 2	8 3 1	8 9 1	9 6 1	9 5 2														
		<b>* TOTALS</b>																						
Brain, Cerebellum		+ +																						<b>20</b>
Brain, Cerebrum		+ +																						<b>20</b>
<b>RESPIRATORY SYSTEM</b>																								
Lung		+ +																						<b>20</b>
Infiltration Cellular, Histiocyte																								1 1.0
Metaplasia, Osseous																								1 1.0
Nose		+ +																						<b>20</b>
Trachea		+ +																						<b>20</b>
<b>SPECIAL SENSES SYSTEM</b>																								
Eye		+ +																						<b>20</b>
Cataract																								1 2.0
Retina, Degeneration																								1 2.0
Harderian Gland		+ +																						<b>20</b>
<b>URINARY SYSTEM</b>																								
Kidney		+ +																						<b>20</b>
Nephropathy		1 1 2 1 1 2 1 1 1 1 1 2 1 1 1 1 2 1 2 1 2																						18 1.3
Urinary Bladder		+ +																						<b>20</b>

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

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Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.92 Furan 36 wk</b>	DAY ON TEST																					
		0 2 5 3	0 2 5 2																			
ANIMAL ID	0 0 1 3 1	0 0 1 5 2	0 0 6 6 2	0 0 6 8 1	0 0 8 8 2	0 0 8 8 2	0 0 2 2 1	0 0 2 2 1	0 0 4 4 1	0 0 4 4 1	0 0 5 5 1	0 0 4 4 1	0 0 9 9 1	0 0 9 9 1	0 0 9 9 1	0 0 0 0 1	0 0 3 3 1	0 0 3 3 1	0 0 4 4 1	0 0 0 0 1	0 0 0 0 1	0 0 0 0 1
	<b>* TOTALS</b>																					

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Cholangiofibrosis	1	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	17 1.1
Granuloma	1	2	1	1	2	1	2	1	2	1	1	1	1	1	1	1	2	2	2	2	1	19 1.4
Mixed Cell Focus																						1
Vacuolization Cytoplasmic	1	1	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1	2	1	2	1	16 1.3
Bile Duct, Biliary Tract, Hyperplasia	1																					6 1.3
Bile Duct, Subcapsular, Hyperplasia	1	2	1	1	1	2	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	19 1.2
Hepatocyte, Hypertrophy																						2 1.5
Hepatocyte, Necrosis	1	1	1	2	1	2	2	1	1	1	1	1	1	1	1	1	2	1	2	1	1	9 1.6
Oval Cell, Hyperplasia	1																					1 1.0
Periportal, Cytoplasmic Alteration	1	1																				7 1.1
Subcapsular, Fibrosis	1	2	1	1	1	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	1	20 1.3
Subcapsular, Inflammation, Chronic	1	2	1	1	1	2	2	2	1	1	1	2	1	2	1	1	1	1	1	1	1	20 1.3

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

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1-4 .. Lesion qualified as:

- 1) Minimal
- 3) Moderate
- 2) Mild
- 4) Marked

Experiment Number: 10119 - 01  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344/NCTR

### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Furan  
 CAS Number: 110-00-9

Date Report Requested: 06/03/2014  
 Time Report Requested: 08:44:34  
 First Dose M/F: 09/07/09 / NA  
 Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 0.92 Furan 36 wk	DAY ON TEST																					
		0 2 5 3	0 2 5 2																			
ANIMAL ID	0 0 1 3 1	0 0 1 5 2	0 0 6 6 2	0 0 6 8 2	0 0 8 8 2	0 1 8 8 2	0 2 2 2 1	0 2 2 2 1	0 2 4 4 1	0 2 4 5 1	0 2 4 5 1	0 2 4 9 1	0 2 9 9 1									
Subcapsular, Pigmentation	1	2	1	1	1	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	1	20 1.3
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Acinus, Degeneration		2	1																			3 1.3
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Epithelium, Degeneration																						1 2.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
<b>CARDIOVASCULAR SYSTEM</b>																						
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Cardiomyopathy		1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16 1.1
<b>ENDOCRINE SYSTEM</b>																						
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Parathyroid Gland	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19
Infiltration Cellular, Lymphocyte		1																				1 1.0
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

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Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.92 Furan 36 wk</b>	DAY ON TEST																				
		0 2 5 3	0 2 5 2																		
ANIMAL ID	0 0 1 3 1	0 0 1 5 2	0 0 6 6 2	0 0 6 8 1	0 1 8 8 2	0 1 8 8 2	0 2 2 2 1														
<b>* TOTALS</b>																					
Pars Distalis, Cyst	X				X																2
Pars Distalis, Hyperplasia																					2.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
Infiltration Cellular, Lymphocyte																					1.2.0
Ultimobranchial Cyst																					1

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Infiltration Cellular, Lymphocyte																				
Inflammation, Suppurative	2	2																		4.2.3
Inflammation, Chronic Active			2	2	2	3														12.1.9
Acinus, Hyperplasia							2	2	1											1.3.0
Duct, Ectasia							3													2.3.5
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Infiltration Cellular, Lymphocyte																				1.1.0
Inflammation, Suppurative																				3.1.3
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

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Experiment Number: 10119 - 01  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344/NCTR

### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Furan

CAS Number: 110-00-9

Date Report Requested: 06/03/2014  
 Time Report Requested: 08:44:34  
 First Dose M/F: 09/07/09 / NA  
 Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE <b>0.92 Furan 36 wk</b>	DAY ON TEST																				
		0 2 5 3	0 2 5 2																		
ANIMAL ID	0 0 1 3 1	0 0 1 5 2	0 0 6 6 2	0 0 6 8 1	0 0 8 8 2	0 0 8 2 1	0 0 2 2 2	0 0 2 2 1	0 0 4 4 1	0 0 4 5 1	0 0 5 4 1	0 0 9 9 2	0 0 9 9 1	0 0 0 0 1	0 0 3 3 2	0 0 3 3 2	0 0 4 4 2	0 0 0 0 1	0 0 0 0 2	0 0 0 0 1	
	<b>* TOTALS</b>																				

### HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Infiltration Cellular, Plasma Cell																					1 3.0
Sinus, Dilatation																					1 2.0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Hyperplasia, Lymphoid																					1 2.0
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Thymus	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19
Atrophy																					4 2.3
Hemorrhage																					1 2.0

### INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20

### MUSCULOSKELETAL SYSTEM

Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

### NERVOUS SYSTEM

Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
-------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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1-4 .. Lesion qualified as:

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Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 0.92 Furan 36 wk	DAY ON TEST																					
		0 2 5 3	0 2 5 2																			
ANIMAL ID	0 0 1 3 1	0 0 1 5 2	0 0 6 6 2	0 0 6 8 1	0 0 8 8 2	0 0 8 8 2	0 0 2 2 1	0 0 2 2 1	0 0 4 4 1	0 0 4 4 1	0 0 5 5 1	0 0 4 4 1	0 0 9 9 2	0 0 9 9 2	0 0 0 0 1	0 0 3 3 1	0 0 3 3 1	0 0 4 4 1	0 0 0 0 1	0 0 4 4 1	0 0 0 0 1	0 0 4 4 1
<b>* TOTALS</b>																						
Brain, Cerebellum	+ + + + + + + + + + + + + + + + + + + +	20																				
Brain, Cerebrum	+ + + + + + + + + + + + + + + + + + + +	20																				
<b>RESPIRATORY SYSTEM</b>																						
Lung	+ + + + + + + + + + + + + + + + + + + +	20																				
Infiltration Cellular, Histiocyte	1 1	2 1.0																				
Nose	+ + + + + + + + + + + + + + + + + + + +	20																				
Inflammation, Suppurative	1	1 1.0																				
Epithelium, Hyperplasia	2	1 2.0																				
Trachea	+ + + + + + + + + + + + + + + + + + + +	20																				
<b>SPECIAL SENSES SYSTEM</b>																						
Eye	+ + + + + + + + + + + + + + + + + + + +	20																				
Harderian Gland	+ + + + + + + + + + + + + + + + + + + +	20																				
Infiltration Cellular, Lymphocyte	1 1	2 1.0																				
<b>URINARY SYSTEM</b>																						
Kidney	+ + + + + + + + + + + + + + + + + + + +	20																				
Hydronephrosis	1	1 1.0																				
Nephropathy	1 2 1 1 1 2 1 1 1 1 1 1 1 2 1 2 1 1 2	18 1.3																				
Urinary Bladder	+ + + + + + + + + + + + + + + + + + + +	20																				

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+ .. Tissue examined microscopically

M .. Missing tissue

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Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 2 Furan 36 wk	DAY ON TEST																				
		0 2 5 3	0 2 5 2																		
ANIMAL ID	0 0 1 7 2	0 0 1 0 1	0 0 1 5 1																		
	* TOTALS																				

## ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Cholangiofibrosis	1	1	2	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1.2
Granuloma	1	1	2	2	1	2	2	1	1	2	2	1	2	2	2	2	1	1	2	2	2	1.6
Mixed Cell Focus	X				X	X									X							5
Pigmentation																						1.4.0
Tension Lipidosis																						1.2.0
Vacuolization Cytoplasmic	2	2	2	1	1	2	1	2	2	3	1	2	2	2	2	2	2	2	1	2	2	17 1.8
Bile Duct, Biliary Tract, Hyperplasia	1	2	2	2	1	2	3	1	2	4	1	2	3	2	2	2	1	1	1	2	2	19 1.8
Bile Duct, Subcapsular, Hyperplasia	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	20 1.8
Hepatocyte, Hypertrophy	2		1	2	1	2			2			1	3		2	1	2	2				12 1.8
Hepatocyte, Necrosis	1	1	1	2		2			1			2		2	1							10 1.4
Oval Cell, Hyperplasia	1	2	2	2	1	2	3	2	2	2	3	3	3	3	3	3	3	1	3			16 2.2
Periportal, Cytoplasmic Alteration	2	2	2	2	2	2	2	1	2	2	2	2	3	2	2	2	2	2	2	2	2	19 2.0
Subcapsular, Fibrosis	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	2		20 1.8

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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M .. Missing tissue

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A .. Autolysis precludes evaluation

I .. Insufficient tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:44:34

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE 2 Furan 36 wk	DAY ON TEST																					
		0 2 5 3	0 2 5 2																			
ANIMAL ID	0 0 1 7 2	0 0 4 0 1	0 0 4 9 1	0 1 5 5 1	0 1 5 8 1	0 1 5 9 1	0 1 6 1 2	0 1 1 3 1	0 2 3 3 1	0 2 3 4 1	0 2 3 4 2	0 2 3 5 1	0 2 3 6 2	0 2 4 5 1	0 2 4 7 1							
Subcapsular, Inflammation, Chronic	2 2	1 1	1 1	1 1	1 1	1 1	2 2															
Subcapsular, Pigmentation	2 2	1 1	1 1	1 1	1 1	1 1	2 2															
Pancreas	+ 2	+ +	+ 4	+ 1	+ +	+ +	+ +	+ +	+ +	20 3												
Acinus, Degeneration																						2.3
Salivary Glands	+ +	20																				
Stomach, Forestomach	+ +	20																				
Stomach, Glandular	+ +	20																				
<b>CARDIOVASCULAR SYSTEM</b>																						
Blood Vessel	+ +	20																				
Heart	+ 1	+ 2	+ 1	+ 1	+ 1	+ 1	+ 2	+ 1	+ 3	20 14												
Cardiomyopathy																						1.3
<b>ENDOCRINE SYSTEM</b>																						
Adrenal Cortex	+ +	20																				
Hypertrophy																						1.0
Adrenal Medulla	+ +	20																				
Islets, Pancreatic	+ +	20																				
Parathyroid Gland	+ +	20																				
Pituitary Gland	+ +	20																				

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FISCHER 344 RATS-NCTR RATS MALE 2 Furan 36 wk	DAY ON TEST																				
		0 2 5 3	0 2 5 2																		
ANIMAL ID	0 0 1 7 2	0 0 4 0 1	0 0 4 2 1	0 0 9 3 1	0 1 5 5 1	0 1 5 8 1	0 1 9 9 1	0 1 6 1 3	0 1 3 4 1	0 2 3 3 2	0 2 3 4 1	0 2 6 4 2	0 2 4 5 1	0 2 7 7 1	0 2 7 7 1	0 2 8 4 1	0 2 7 7 1	0 2 8 7 2	0 2 7 7 1	0 2 8 7 2	0 2 8 7 2
* TOTALS																					
Pars Distalis, Cyst	X																				3
Pars Distalis, Hyperplasia		X																			1 2.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	

## GENERAL BODY SYSTEM

NONE

## GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Hypospermia																				2 4.0
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Infiltration Cellular, Lymphocyte																				1 1.0
Inflammation, Suppurative																				1 3.0
Inflammation, Chronic Active																				14 1.8
Duct, Ectasia																				1 2.0
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Inflammation, Suppurative																				5 1.2
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20
Interstitial Cell, Hyperplasia																				1 1.0
Seminiferous Tubule, Degeneration																				3 3.3

## HEMATOPOIETIC SYSTEM

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**Experiment Number:** 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

**Test Type: CHRONIC**

## **Route: GAVAGE**

**Species/Strain:** RATS/F 344/NCTR

**Date Report Requested:** 06/03/2014

**Time Report Requested:** 08:44:34

**First Dose M/F:** 09/07/09 / NA

Lab: NCTR

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**Experiment Number:** 10119 - 01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

**Test Type: CHRONIC**

## **Route: GAVAGE**

**Species/Strain:** RATS/F 344/NCTR

**Date Report Requested:** 06/03/2014

**Time Report Requested:** 08:44:34

**First Dose M/F:** 09/07/09 / NA

Lab: NCTR

\*\*\* END OF REPORT \*\*\*

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